

REVISION OF AUSTRALIAN LEPIDOPTERA, II.

BY A. J. TURNER, M.D., F.E.S.

Fam. NOTODONTIDÆ.

I have a few notes to add to my revision (Proc. Linn. Soc. N. S. Wales, 1903, p.42).

In a recent paper* Mr. Bethune-Baker has described twenty new species of this family from New Guinea, and a few of these appear to me to be Australian species.

HYLEORA INCLYTA.

Hyleora lacerta, Druce, Ann. Mag. Nat. Hist. (7) vii. p.78, from W.A., is apparently a synonym of this species.

NEOLA SEMIAURATA.

N.S.W. : Sydney (Waterhouse).

SPATALIA ARGENTIFERA.

♂. *Allata argentifera*, Wlk., Journ. Linn. Soc. vi. p.140.

Celeia plusiata, Wlk., Brit. Mus. Cat. xxxii. p.463.

Celeia sikkima, Moore, Lep. Atk. p.63.

Spatalia argentifera, Hmps., Moths Ind. i. p.169.

♀. *Spatalia costalis*, Moore, Lep. Atk. p.69.

Spatalia costalis, Hmps., Moths Ind. i. p.170.

♂. 47 mm. Head, palpi, and thorax fuscous-brown. Antennæ fuscous-brown; pectinations moderate (3), dull ochreous, apical $\frac{1}{3}$ simple. Abdomen grey. Legs fuscous, irrorated, and tarsi annulated with ochreous-whitish. Forewings shaped as in ♀; grey with some dark fuscous and brownish irroration; two dark fuscous spots beneath costa just before, and after $\frac{1}{4}$; a snow-white

* Nov. Zool. 1904, p.367.

spot with silvery lustre in disc at $\frac{1}{4}$ beneath cell, triangular with a slight prolongation towards base; this is succeeded by two similarly white short streaks along veins 3 and 4, broadly confluent in middle; a dark fuscous streak runs between base and first spot, which is preceded and followed by a brown spot; two dark fuscous dots followed by ochreous-whitish on costa near apex; a fuscous patch at apex; an oblique dark fuscous shade in mid-disc at about $\frac{1}{3}$; a short pale ochreous area on termen beneath apical patch representing the costal streak of ♀; cilia gray, above mid-termen mixed with brownish-fuscous and whitish-ochreous. Hindwings as in ♀.

The ♀ I have already described. The two sexes are very dissimilar, and I would not have suspected their relationship if Mr. F. P. Dodd had not bred both from the same larvæ, feeding on *Pongamia glabra*.

N.Q.: Townsville. Also from Borneo, Malay Peninsula, and India.

CERURA AUSTRALIS.

Cerura multipunctata, Bak., (Nouv. Zool. 1904, p.381) from New Guinea, is I suspect only a local form of this species. Intermediate varieties may be expected to be discovered on the Queensland coast.

CENOSANDA BOISDUVALII.

♀. *Lomatosticha nigrostriata*, Motschulsky, Stett. Ent. Zeit. xxxiii. p.359 (1872).

Sir George Hampson kindly forwarded me a copy of Motschulsky's description.

DANIMA BANKSLE.

N.Q.: Townsville; from larvæ feeding on *Grevillea striata* (Dodd).

THEMERASTIS AMALOPA,* n.sp.

♀. 46 mm. Head and palpi dark brown. Thorax pale brownish; collar dark brown. Abdomen grey. Legs brownish. Forewings elongate, costa strongly arched, apex rounded, termen

* ἀμαλωπος, soft-looking.

obliquely rounded; pale brownish mixed with whitish; markings blackish; a fine outwardly-curved transverse line near base, followed by a dark suffusion containing two or three similar lines more or less developed; two fine parallel outwardly-curved lines from $\frac{1}{4}$ costa to $\frac{2}{3}$ dorsum; these are followed by a vague pale suffusion; a discal dot at end of cell; two very fine parallel wavy lines from $\frac{2}{3}$ costa to before tornus, above mid-disc the anterior of these lines is thickened to form a second discal dot; a small blackish suffusion at tornus surmounted by some dark brown scales; a series of black pale-edged dots forming a sub-terminal line; a series of very indistinct terminal dots; cilia pale brown. Hindwings with termen rounded; pale brownish-fuscous; cilia concolorous.

Type in Coll. Turner.

N.Q. : Mulgrave River near Cairns; one specimen.

OSICA GLAUCA.

Osica turneri, Bak., (Nov. Zool. 1904, p.374, pl.vi. f.31) exactly corresponds to some Australian examples of this rather variable species, and *Osica funerea*, Bak., (*op. cit.* p.374) is doubtless another synonym. This species, therefore, ranges as far as New Guinea.

CASCERA MUSCOSA.

N.Q. : Kuranda, in March (Dodd). One ♂ with antennal pectinations $2\frac{1}{2}$, apical $\frac{2}{5}$ simple. This example corresponds exactly with *Cascera bella*, Bak., (*op. cit.* p.374) from New Guinea.

Unrecognised species.

Stauropis (?) *euryscia*, Low., Trans. Roy. Soc. S. Austr. 1903, p.28. N.S.W. : Broken Hill.

Fam. SYNTOMIDÆ.

Tongue usually well-developed. Tibiæ with the spurs short. Forewings with 1^c absent, 5 approximated to 4 at origin, 7, 8, 9 stalked. Hindwings small; 1^a often absent, 1^c absent, 8 absent

(or in exotic genera rarely rudimentary and not reaching costa); frenulum present; retinaculum bar-shaped.

A family derived from the *Arctiade*, usually easily distinguished by the absence of vein 8 of the hindwings, but some of the exotic genera are not so easily separated. With the *Zygenide*, with which it was formerly confused, it has no near relationship, the resemblance being only analogical, or probably, in some instances, mimetic. The Australian species give little idea of its extent; there are some twelve hundred known species, which form the subject of the first volume of Sir Geo. Hampson's great work on the Lepidoptera Phalænæ. These may be divided into two groups, one comprising three-fourths of the species, being confined to the Neotropical region, with the exception of a few which range into North America, and of the single genus *Euchromia*. The other is restricted to the Eastern hemisphere, being mainly developed in the tropical and subtropical zones, with stragglers into the temperate zone.

Mr. Edw. Meyrick has published a valuable paper on the Australian species;* but considerable fresh material has come to hand since that date, and the group, which is one of special difficulty, needs fresh revision. Neither this writer nor Sir Geo. Hampson had an adequate amount of Australian material to work with.

The Australian species probably form a relatively inedible group, acquiring protection either from conspicuously brilliant coloration as in *Euchromia*, or in close adherence to a common and simple pattern of coloration (synaposematic) in the case of the other genera. To this pattern are also assimilated the species of the genera *Thyrassia* and *Monoschalis* among the *Zygenide*, and *Asura*, and perhaps also *Eutane* among the *Arctiude*.

- A. Hindwings with vein 7 absent.
 - B. Hindwings with 3 and 4 absent..... 1. CERYX.
 - BB. Hindwings with 3 present, 4 absent.
 - C. Hindwings with 3 and 5 connate..... 2. SYNTOMIS.
 - CC. Hindwings with 3 and 5 separate..... 3. ERESSA.
- AA. Hindwings with 7 present..... 4. EUCHROMIA.

* These Proceedings, 1886, p.773.

Gen. 1. CERYX.

Ceryx, Wlgrn., Wien. Ent. Mon. vii. p.140 (1863); Hmps., Cat.

Lep. Phal. i. p.35.

Agaphthora, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.774.

Tongue well-developed. Palpi short, porrect. Antennæ of ♂ shortly pectinate, serrate, or simple. Posterior tibiæ with one or two pairs of minute spurs. Forewings with 7, 8, 9, 10, 11 stalked. Hindwings with 3, 4, and 7 absent.

Type, *C. anthraciformis*, Wlgrn., from South Africa.

A genus of about thirty known species developed in the Indo-Malayan and African regions. The section of the genus (*Agaphthora*) to which the Australian species belong is characteristic of New Guinea and the adjacent islands. In it the ♂ antennæ are simple or nearly so, and the fore tibiæ and tarsi of this sex are densely clothed with long hairs and scales.

1. Abdomen with six orange rings..... *sphenodes*.
 Abdomen black, with orange lateral spots..... *guttulosa*.

1. CERYX SPHENODES.

Agaphthora sphenodes, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.774.

Ceryx sphenodes, Hmps., Cat. Lep. Phal. i. p.38, pl.i. f.6.

Type in Macleay Museum, Sydney.

N.Q.; Cairns, Kuranda. Probably also from New Guinea, but in this form the crown of head is orange.

2. CERYX GUTTULOSA.

Syntomis guttulosa, Wlk., Brit. Mus. Cat. xxxi. p.73.

Agaphthora melanora, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.774.

Ceryx guttulosa, Hmps., Cat. Lep. Phal. i. p.39, pl.i. f.8.

Type in British Museum.

N.Q.: Cape York. Also from Aru and Kei Island.

Gen. 2. SYNTOMIS.

Syntomis, Ochs., Eur. Schmett. ii. p.103; Hmps., Cat. Lep. Phal. i. p.59.

Hydrusa, Wlk., Brit. Mus. Cat. i. p.255; Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.774.

Tongue well-developed. Palpi short, drooping, loose-haired. Antennæ in ♂ shortly pectinate, laminate, serrate, or simple. Tibial spurs very short, posterior tibiæ with two pairs. Forewings with 4 and 5 connate, 7, 8, 9, 10, and 11 stalked. Hindwings with 4 absent, 3 and 5 connate or short-stalked, 7 absent.

Type, *S. phegea*, Linn., from Europe.

A large genus widely distributed in the Eastern hemisphere, the species being most numerous in or near the tropics. The Australian species are all closely related, and many of them subject to variation, while the general pattern is the same in nearly all. Their study is therefore a matter of difficulty, and to understand the species rightly good series of examples are necessary. It is very difficult to construct a satisfactory tabulation, some characters being constant in many species, yet variable in others, and that given below may perchance not prove trustworthy in the case of single abnormal specimens.

The following description applies to all the Australian species with very few exceptions.

Head black or orange or yellow-ochreous, in the latter case black between antennæ; face orange or yellow-ochreous. Antennæ black, sometimes white at apex. Thorax black, collar (tegulæ) always orange or yellow-ochreous; sometimes a posterior or more spots of similar colour. Abdomen black, with seven orange or yellow-ochreous rings in ♂, 6 in ♀, of which the first does not extend to ventral surface, and the last one or two may be absent; tuft black or partly or wholly orange or yellow-ochreous. Legs black. Forewings elongate-triangular, costa slightly or moderately arched, apex rounded, termen slightly or moderately rounded, oblique; black often with purplish or greenish lustre; with ochreous or orange-ochreous (rarely colourless) spots, vary-

ing from nearly colourless and translucent to orange and opaque; an oblong or rounded basal spot beneath cell; a more elongate intracellular spot varying between oblong and triangular; an oblique dorsal spot of variable shape between vein 1 and vein 2; a usually elongate apical spot between veins 6 and 7; a rounded terminal spot between veins 3 and 5 bisected into an upper and lower division by vein 4; occasionally there is a small supra-apical spot, an intermediate spot between veins 5 and 6 connecting apical and terminal spots, and a supplementary spot beyond the dorsal spot and separated from it by vein 2. Hindwings small, triangular; coloured similarly to forewings; a basal spot usually large, sometimes divided into two divisions by submedian vein; a discal spot of very variable size, usually rounded, divided into two divisions by vein 3, the upper division sometimes obsolete, sometimes touching or confluent with basal spot.

In the following species this description is to be assumed to apply unless expressly contradicted, and the spots on the wings will for the sake of brevity and clearness be designated by name. It has appeared advisable to redescribe all the species on account of the difficulty of the group, and the more abundant material at my disposal in most instances, than was available for the earlier descriptions.

1. Abdomen orange.....	3. <i>xanthosoma</i> .
Abdomen black, with orange or ochreous rings.....	2.
2. Forewings with intermediate spot fully developed, at least anteriorly.....	3.
Forewings with intermediate spot absent, or developed only posteriorly.....	9.
3. Forewings with basal and dorsal spots separate... ..	4.
Forewings with basal and dorsal spots completely fused.....	6.
4. Patagia orange at base.....	4. <i>chlorometis</i> .
Patagia black.....	5.
5. Thorax wholly black.....	5. <i>insularis</i> .
Thorax with a posterior orange spot.....	6. <i>pactolina</i> .
6. Patagia with orange spots.....	7. <i>stenozana</i> .
Patagia black.....	7.
7. Antennæ white-tipped.....	13. <i>choneutospila</i> .
Antennæ not white-tipped.....	8.

8. Hindwings with spots large and confluent.....	8. <i>marella</i> .
Hindwings with spots small, touching.....	9. <i>lampetis</i> .
9. Abdomen loosely haired.....	10.
Abdomen smooth.....	12.
10. Thorax wholly black.....	10. <i>orphnæa</i> .
Thorax with yellow scales or spots.....	11.
11. Head black.....	11. <i>xanthura</i> .
Head yellow.....	12. <i>recedens</i> .
12. Thorax wholly black or with only a few yellowish scales posteriorly.....	13.
Thorax with posterior yellow spot.....	23.
13. Antennæ white-tipped.....	14.
Antennæ not white-tipped.....	21.
14. Wings wholly black or with a single spot only.....	15.
Wings spotted.....	16.
15. Head reddish-orange.....	14. <i>bicolor</i> .
Head black.....	15. <i>phepsalotis</i> var. <i>eschatias</i> .
16. Anal tuft black.....	5. <i>insularis</i> var.
Anal tuft not wholly black.....	17.
17. Upper division of basal spot of hindwings obsolete...	18.
Upper division of basal spot of hindwings not obsolete	20.
18. Spots deep orange, opaque.....	16. <i>chromatica</i> .
Spots not deep orange and opaque.....	19.
10. Spots moderate, nearly colourless.....	17. <i>paradelpha</i> .
Spots very small, coloured.....	15. <i>phepsalotis</i> .
20. Hindwings with spots touching.....	18. <i>magistri</i> .
Hindwings with spots separate.....	19. <i>annulata</i> .
21. Spots colourless.....	22. <i>hyalota</i> .
Spots not colourless.....	22.
22. Abdomen with three apical segments black.....	20. <i>cyanura</i> .
Abdomen with apical segment black.....	21. <i>antitheta</i> .
23. Patagia with orange or ochreous spots.....	24.
Patagia black.....	29.
24. Spots colourless.....	23. <i>huebneri</i> .
Spots not colourless.....	25.
25. Spots deep orange, opaque.....	24. <i>chroma</i> .
Spots not deep orange.....	26.
26. Abdomen with yellow or orange rings.....	27.
Abdomen with dull brownish-ochreous rings.....	35. <i>dyschlæna</i> .
27. Antennæ of ♂ serrate.....	25. <i>attenuata</i> .
Antennæ of ♂ pectinate.....	28.
28. Hindwings with spots separate or touching.....	27. <i>prosomæa</i> .

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| Hindwings with spots partly confluent | 26. <i>humeralis</i> . |
| 29. Antennæ white-tipped..... | 28. <i>leucacma</i> . |
| Antennæ not white-tipped..... | 30. |
| 30. Abdomen with two apical segments except tuft black | 29. <i>paraula</i> . |
| Abdomen with two apical segments not black | 31. |
| 31. Forewings with ochreous scales at extreme base... .. | 30. <i>heptaspila</i> . |
| Forewings without ochreous scales at extreme base.. | 32. |
| 32. Hindwings with triangular discal spot, tuft of ♂ | |
| black at sides..... | 31. <i>trigoncphora</i> . |
| Hindwings with discal spot not triangular, tuft of ♂ | |
| not black at sides..... | 33. |
| 33. Spots of hindwing confluent..... | 32. <i>aperta</i> . |
| Spots of hindwing separate..... | 34. |
| 34. Wings thinly scaled, without iridescence..... | 33. <i>melitospila</i> . |
| Wings densely scaled, with purplish or greenish iri- | |
| descence..... | 34. <i>pyrocoma</i> . |

3. SYNTOMIS XANTHOSOMA.

Hydrusa xanthosoma, Turn., Trans. Roy. Soc. S. Aust. 1898, p.93.

Syntomis cremnotherma, Low., Proc. Linn. Soc. N. S. Wales, 1900, p.29.

Head orange-ochreous, without black spot between antennæ. Antennæ fuscous irrorated with ochreous; in ♂ shortly pectinate. Thorax and abdomen orange-ochreous, the latter without black rings. Legs orange-ochreous; tarsi fuscous. Forewings with orange-ochreous opaque spots; intermediate and supplementary spots usually fully developed; a narrow supra-apical spot; an orange streak above cell from base to $\frac{2}{3}$. Hindwings with spots large and confluent.

Type in Coll. Turner.

Var. *a*. Intermediate spot wholly obsolete. One ♀ in Coll. Lyell.

N.W.A.: Roeburne, Lennard River (100 miles from Derby; Froggatt).—S.A.: Irrapatana (Lower).

4. SYNTOMIS CHLOROMETIS.

Hydrusa chlorometis, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.782.

Syntomis chlorometis, Hmps., Cat. Lep. Phal. i. p.68, pl.ii. f.22.

Head yellow-ochreous, with a few fuscous scales between antennæ. Antennæ black to apices; in ♂ shortly pectinate. Thorax black, a posterior spot and bases of patagia yellow-ochreous. Abdomen rather loosely haired; in ♂ with seven yellow-ochreous rings; tuft yellow-ochreous, at sides blackish. Femora and tibiæ with some ochreous irroration. Forewings with intermediate spot fully developed; small supra-apical and supplementary spots. Hindwings with spots large and confluent.

Type in Coll. Meyrick.

Q. : Dalby, Killarney—N.S.W. : Glen Innes.

5. SYNTOMIS INSULARIS.

Hydrusa insularis, Butl., Journ. Linn. Soc. Zool. xii. p.353.

Hydrusa stelotis, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.777.

Syntomis insularis, Hmps., Cat. Lep. Phal. i. p.73, pl.ii. f.20.

Head orange. Antennæ with white apices. Thorax black. Abdomen in ♂ with seven orange rings; tuft in ♂ black. Forewings with rather small orange spots; intermediate spot present. Hindwings with basal spot rather large; discal spot small, touching basal.

Var. *a*. Intermediate spot minute or absent.

Type in British Museum.

I have no examples of this species.

N.A. : Barnard Island—N.Q. : Cooktown.

6. SYNTOMIS PACTOLINA.

Syntomis pactolina, Wlk., Brit. Mus. Cat. xxxi. p.72; Hmps., Cat. Lep. Phal. i. p.71, pl.ii. f.19.

Hydrusa sphenophora, Turn., Trans. Roy. Soc. S. Aust. 1898, p.94.

Head orange-ochreous. Antennæ black to apices; in ♂ serrate. Thorax with a posterior orange-ochreous spot. Abdomen with orange-ochreous rings and in ♂ with similar tuft. Forewings with intermediate spot fully developed. Hindwings with spots large and confluent.

Type in British Museum.

N.A. : —N.W.A. : Lennard River (Froggatt).

7. SYNTOMIS STENOZONA.

Syntomis stenozona, Hmps., Cat. Lep. Phal. i. p.69, pl.ii. f.21.

Thorax with orange spots on patagia and a posterior spot. Forewing with pale ochreous somewhat hyaline spots; basal and dorsal spots completely confluent; a small supplementary spot; intermediate spot present but shorter than apical and terminal, its posterior portion being obsolete. Hindwing with spots confluent.

One specimen in British Museum labelled Queensland, and two (including the type) from Timor. The Australian locality requires confirmation.

8. SYNTOMIS MARELLA.

Syntomis marella, Butl., Journ. Linn. Soc. 1876, p.350; Hmps., Cat. Lep. Phal. i. p.70, pl.ii. f.26.

Hydrusa ecliptis, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.776.

Head reddish-orange. Antennæ black to apices; in ♂ slightly serrate. Thorax black, with a few reddish-orange scales posteriorly. Abdomen with seven reddish-orange rings in ♂, six in ♀; tuft in ♂ black. Fore-tibiæ with an ochreous tuft of hairs posteriorly in both sexes; mid-tibiæ ochreous on inner surface. Forewings with spots rather large, reddish-tinged, translucent; basal and dorsal spots completely confluent; intermediate spot developed equally with apical and terminal spots; occasionally minute supra-apical and supplementary spots. Hindwings with basal and discal spots large and confluent.

Type in British Museum.

N.Q. : Cooktown, Geraldton, Townsville—Q. : Brisbane.

9. SYNTOMIS LAMPETIS.

Hydrusa lampetis, Turn., Trans. Roy. Soc. S. Aust. 1898, p.94.

Head reddish-orange. Antennæ black to apices. Thorax black. Abdomen with six reddish-orange rings in ♀. Fore-tibiæ with an ochreous tuft of hairs posteriorly. Forewings black with purple lustre; spots small, reddish-tinged, translucent; basal and

dorsal completely confluent; intermediate spot developed equally with apical and terminal. Hindwing with basal spot small; discal very small, triangular, touching basal.

Possibly a variety of the preceding. Type in Queensland Museum.

N.Q. : Bowen.

10. SYNTOMIS ORPHNÆA.

Hydrusa orphnæa, Turn., Trans. Roy. Soc. S. Aust. 1898, p.98.

Head black. Antennæ black to apices; with some fine ochreous irroration; in ♂ shortly pectinate. Thorax black. Abdomen hairy, with pale ochreous rings and tuft; six or seven rings in ♂, the first being sometimes obsolete; six, including the first, in ♀. Forewings rather thinly scaled, without iridescence; spots pale ochreous; intermediate spot absent or slightly developed posteriorly; supra-apical and supplementary spots sometimes present. Hindwings with spots rather large, touching.

Type in Coll. Turner.

Q. : Toowoomba, Dalby, Warwick, Stanthorpe — N.S.W. : Tenterfield.

11. SYNTOMIS XANTHURA,* n.sp.

♂. 39-42 mm. Head black, sometimes with a few ochreous scales. Antennæ whitish-ochreous at apices; in ♂ very shortly pectinate. Thorax with ochreous spots on patagia, and a posterior spot. Abdomen loosely hairy; in ♂ with seven ochreous rings; tuft in ♂ ochreous. Anterior femora ochreous in front; anterior tibiæ with an ochreous posterior tuft. Forewings with pale ochreous spots; a well-developed supra-apical spot. Hindwings with discal spot triangular, touching or confluent with basal.

Distinguished from *S. prosomæa* by the whitish-ochreous antennal apices, from *S. magistri* by the spotted thorax.

Type in Coll. Lyell.

Vic. : Brentwood, in March; two specimens taken by Mr. S. P. Croom.

* *ξανθοουρος*, yellow-tailed.

12. SYNTOMIS RECEDENS.

Hydrusa recedens, Luc., Proc. Linn. Soc. N. S. Wales, 1891, p.281;
Turn., Trans. Roy. Soc. S. Aust. 1898, p.99.

Head ochreous-yellow. Antennæ black to apices. Thorax black, with some ochreous-yellow scales posteriorly; patagia black or ochreous-yellow. Abdomen hairy, with seven pale ochreous rings; tuft in ♂ pale ochreous in centre, black laterally. Forewings rather thinly scaled; spots pale ochreous, translucent; a well-developed supplementary and small supra-apical spot. Hindwings with large basal and rather small discal spot.

Smaller than allied species. Type in Coll. Lucas.

Q : Duaringa.

13. SYNTOMIS CHONEUTOSPILA,* n.sp.

♂. 29-32 mm. Head black. Antennæ white at apex; in ♂ serrate. Thorax black. Abdomen in ♂ with seven orange rings; tuft in ♂ orange in centre, black laterally. Forewings with spots reddish-ochreous, semihyaline, basal and dorsal spots completely confluent; intermediate spot fully developed in anterior part, but shorter than apical and terminal spots. Hindwings with spots small; upper segment of basal spot obsolete; upper segment of discal spot minute or obsolete.

Apparently nearest to *annulata*, *chromatica*, and *phepsalotis*, though very distinct.

Type in Coll. Turner.

Q. : Brisbane, in March; two specimens (H. Tryon).

14. SYNTOMIS BICOLOR.

Euchromia (Hydrusa) bicolor, Wlk., Brit. Mus. Cat. i. p.255.

Hydrusa bicolor, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.785.

Syntomis bicolor, Hmps., Cat. Lep. Phal. i. p.75.

Head reddish-orange. Antennæ white at apices; in ♂ serrate. Thorax occasionally with a few orange scales posteriorly. Abdomen with seven reddish-orange rings in ♂, six in ♀; tuft black.

* χωνευτοσπιλος, with fused spots.

Forelegs of ♂ with a small tuft of ochreous hairs on posterior surface. Fore- and hindwings uniformly black, without spots.

Type in British Museum.

Var. *a.* ♀. Hindwing with a few orange scales representing basal and discal spots.

N.Q. : Cairns, Kuranda—Q. : Brisbane.

15. SYNTOMIS PHEPSALOTIS.

Hydrusa phepsalotis, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.784.

Hydrusa eschatias, Meyr., *op. cit.*, 1886, p.785 (var.).

Head black. Antennæ white at apices; in ♂ deeply serrate. Abdomen in ♂ with seven, in ♀ with six reddish-orange rings; tuft in ♂ reddish-orange in centre, black laterally. Fore-tibiæ with a posterior ochreous tuft. Forewings with spots small or dot-like or partly obsolete, ochreous sometimes slightly translucent. Hindwings with spots small or partly or wholly obsolete; upper segments of basal and discal spots obsolete.

Type in Macleay Museum, Sydney.

Var. *eschatias*. Both wings uniformly black, without spots, or with a single spot on fore- or hindwings. Probably every variety between this and the type form will be found.

Q. : Maryborough, Mount Tambourine—N.S.W. : Newcastle, Bulli, Wollongong.

16. SYNTOMIS CHROMATICA, n.sp.

♂♀. 40-42 mm. Head black. Antennæ white at apices; in ♂ serrate. Thorax black. Abdomen in ♂ with seven, in ♀ with six orange rings; tuft in ♂ orange in centre, black laterally. Fore-femora suffused with ochreous anteriorly, fore-tibiæ with a tuft of ochreous hairs posteriorly. Forewings with purplish reflections; spots small, opaque, deep orange; intracellular spot nearly square; rarely a small supra-apical dot. Hindwings with upper division of basal spot completely obsolete; discal spot small, upper division minute or obsolete.

Larger than the preceding species, with the spots deeper orange and apparently not variable.

Type in Coll. Turner.

Q. : Mount Tambourine; in February and March; six specimens.

17. *SYNTOMIS PARADELPHA*,* n.sp.

♂♀. 26-29 mm. Head black. Antennæ white at apices; in ♂ serrate. Thorax black. Abdomen in ♂ with seven, in ♀ with six reddish-orange rings; tuft in ♂ reddish-orange in centre, black laterally. Anterior femora irrorated with ochreous anteriorly; anterior tibiæ with tuft of ochreous hairs posteriorly. Forewings with spots translucent, nearly colourless, basal spots slightly reddish-tinged; spots in ♂ usually small, in ♀ moderate. Hindwings with basal spot small, in ♂ very small, upper division obsolete or nearly so; discal spot small, upper division minute or obsolete.

Type in Coll. Turner.

Q. : Killarney, in November; nine specimens, taken by Mr. H. Tryon.

18. *SYNTOMIS MAGISTRI*, nom.nov.

Hydrusa aperta, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.783, nec Wlk.

Head black. Antennæ white at apices. Thorax black. Abdomen with orange rings. Forewings with spots orange-ochreous; sometimes small supra-apical and supplementary spots. Hindwings with spots large and touching.

Type in Coll. Meyrick. I have ventured to dedicate this species to Mr. Meyrick, who has been my master in entomology.

N.S.W. : Bathurst.

19. *SYNTOMIS ANNULATA*.

Zygaena annulata, Fab., Syst. Ent. p.551.

Hydrusa nigriceps, Butl., Journ. Linn. Soc. Zool. xii. p.352.

Hydrusa intensa, Butl., op. cit. p.353.

* παραδελφος, closely akin.

Hydrusa annulata, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.783.

Hydrusa intensa, Meyr., *op. cit.* p.784, *nec* Butl.

Syntomis annulata, Hmps., Cat. Lep. Phal. i. p.72.

Head black. Antennæ white at apices, in ♂ rather deeply laminate. Thorax black. Abdomen in ♂ with seven, in ♀ with six orange or reddish-orange rings; tuft in ♂ orange. Fore-tibiæ with a posterior tuft more or less ochreous. Forewings with spots pale ochreous, semi-hyaline; very rarely a small supra-apical or intermediate dot. Hindwings with spots separate.

Var. *a.* Abdominal tuft in ♂ black at sides. At one time I considered this a distinct species, but after examination of large series from different localities I do not think this can be maintained.

Var. *b.* Basal spots of wings reddish-tinged.

Var. *c.* Upper segment of discal spot of hindwing minute or absent.

Var. *d.* ♀. Forewing with basal and dorsal spots partly confluent. A very rare individual abnormality.

The spots are smaller in ♂ than ♀; in some males this difference is exaggerated. As a general rule the males are larger, but they vary from 28 to 45 mm. Sir Geo. Hampson's synonymy of this species needs revision.

N.Q. : Cooktown (?)—Q. : Rockhampton, Maryborough, Nambour, Brisbane, Stradbroke Island, Mount Tambourine, Toowoomba, Dalby, Killarney, Stanthorpe—N.S.W. : Ballina, Grafton, Tenterfield, Sydney, Bulli, Wollongong—Vic. : Walthalla. I doubt very much whether the species occurs outside Australia.

20. SYNTOMIS CYANURA.

Hydrusa cyanura, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.778.

Syntomis cyanura, Hmps., Cat. Lep. Phal. i. p.75.

Head orange. Antennæ black to apices. Thorax black, with a few orange scales posteriorly. Abdomen with three terminal

segments black, lower surface wholly black or with only a few orange scales. Forewings with spots ochreous, semi-hyaline. Hindwing with spots separate.

Type in Coll. Lucas.

N.Q. : Thursday Island.

21. SYNTOMIS ANTITHETA.

Hydrusa antitheta, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.779.

Hydrusa anepsia, Meyr., *op. cit.* p.779 (var.).

Syntomis antitheta, Hmps., Cat. Lep. Phal. i. p.74.

Head orange. Antennæ black to apices. Thorax black, sometimes with a few orange scales posteriorly. Abdomen in ♂ with seven, in ♀ with six reddish-orange rings; tuft in ♂ black. Fore-tibiæ with a few ochreous scales on posterior surface, tuft mostly black. Forewings with spots semi-hyaline, pale ochreous; intermediate and supplementary spots absent or slightly developed. Hindwings with spots separate, touching or confluent.

Var. *anepsia*. Hindwings with spots confluent.

Type in Australian Museum. The type of *anepsia*, which was in the Macleay Museum, is now lost.

N.Q. : Cooktown, Townsville—Q. : Gayndah.

22. SYNTOMIS HYALOTA.

Hydrusa hyalota, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.777.

Syntomis hyalota, Hmps., Cat. Lep. Phal. i. p.69.

Head orange. Antennæ black to apices. Thorax black. Abdomen in ♂ with seven, in ♀ with six orange rings. Forewings with greenish lustre; spots colourless, transparent. Hindwings with spots small; upper division of basal spot obsolete; upper division of discal spot minute or obsolete.

Type formerly in Macleay Museum, Sydney, now lost. There is one example in the Queensland Museum.

N.Q. : Cape York, Bowen.

23. SYNTOMIS HUEBNERI.

Syntomis huebneri, Bdv., Mon. Zyg. p.127, pl.viii. f.4; Hmps., Cat. Lep. Phal. i. p.69.

Syntomis marsdeni, Moore, Lep. E.I.C. p.323; P.Z.S. 1859, p.197, pl.60, f.3.

Syntomis xanthomela, Wlk., Journ. Linn. Soc. Zool. iii. p.184.

Naclia singulata, Wlgrn., Wien. Ent. Mon. iv. p.39.

Buthisia sangaris, Wlgrn., *op. cit.* vii. p.139.

Syntomis contermina, Wlk., Brit. Mus. Cat. xxxi., p.78.

Hydrusa pyrrhodera, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.777.

Syntomis frustulenta, Swin., Cat. Oxf. Mus. i. p.44.

Head black. Antennæ white at apices; in ♂ serrate. Thorax with orange spots on patagia and a posterior spot. Abdomen in ♂ with seven, in ♀ with six orange rings; tuft in ♂ black. Forewings with spots colourless, translucent; sometimes a supra-apical dot. Hindwings with spots separate; upper segment of discal spot sometimes very small.

N.A.: Adelaide River, Roebuck Bay—N.Q.: Cape York, Lizard Island, Cooktown, Port Douglas, Cairns. Also from Java, Malay Peninsula, and India.

24. SYNTOMIS CHROMA.

Hydrusa chroma, Swin., Cat. Oxf. Mus. i. p.50.

Syntomis clementsii, Hmps., Ann. Mag. Nat. Hist. (7) viii. p.165 (1901).

Head orange. Antennæ black to apices; in ♂ serrate. Thorax with patagia and a posterior spot orange. Abdomen in ♂ with seven, in ♀ with six broad orange rings; tuft in ♂ with orange centre, black laterally. Legs partly suffused with orange. Forewings with spots deep orange, opaque; usually a narrow supra-apical spot. Hindwings with basal spot large, sometimes confluent with discal.

Type in Oxford Museum.

N.W.A.: Roeburne, Sherlock River.

25. SYNTOMIS ATTENUATA.

Syntomis attenuata, Hmps., Ann. Mag. Nat. Hist. (7), viii. p.167 (1901).

Head orange-yellow. Antennæ black to apices; in ♂ serrate. Thorax with orange-yellow spots on patagia and a posterior spot. Abdomen in ♂ with seven orange rings; tuft in ♂ with orange centre, black laterally. Forewings with orange-yellow spots; sometimes a narrow supra-apical spot. Hindwings with basal spot large, confluent with discal.

Type in British Museum.

N.A. : Bathurst Island, Heywood Island, Queen Island.

26. SYNTOMIS HUMERALIS.

Hydrusa humeralis, Butl., Journ. Linn. Soc. Zool. xii. p.352.

Eressa olinda, Swin., Cat. Oxf. Mus. i. p.53.

Syntomis humeralis, Hmps., Cat. Lep. Phal. i. p.63.

Head pale ochreous. Antennæ black to apices; in ♂ shortly pectinate. Thorax with pale ochreous spots on patagia and a posterior spot. Abdomen in ♂ with seven, in ♀ with six pale ochreous rings; tuft in ♂ ochreous in centre, black laterally. Anterior femora with a few ochreous scales anteriorly; anterior tibiæ with an ochreous tuft posteriorly. Forewings relatively broad and very much rounded at apex; rather thinly scaled; spots pale ochreous; a small supplementary spot usually present; rarely a small intermediate or supra-apical spot. Hindwings with basal spot rather large; discal triangular, partly confluent.

Type in British Museum.

N.A. : Port Darwin—N.Q. : Cairns, Geraldton, Townsville—Q. : Rockhampton, Duarina.

27. SYNTOMIS PROSOMEA, n.sp.

♂. 28-36 mm. ♀. 26-28 mm. Head blackish mixed with ochreous scales. Antennæ black to apices; in ♂ shortly pectinate. Thorax with ochreous spots on patagia and a posterior spot. Abdomen in ♂ with seven, in ♀ with six ochreous rings; tuft in

♂ ochreous in centre, black laterally. Anterior tibiæ with posterior tuft wholly or partly ochreous. Forewings densely scaled; spots pale ochreous, rather small; occasionally small supra-apical and supplementary spots. Hindwings with discal spot roundish or triangular, usually separate, sometimes touching first.

Var. *a.* Head orange-ochreous.

Var. *b.* Posterior abdominal tuft of ♂ wholly ochreous.

Var. *c.* Discal spot of hindwing with upper segment obsolete.

Var. *d.* Spots on patagia obsolete.

A variable species, yet always distinguishable from *S. humeralis*.

Type in Coll. Turner.

N.Q. : Townsville, Ravenswood—Q. : Rockhampton, Brisbane, Stradbroke Island, Toowoomba.

28. SYNTOMIS LEUCACMA.

Hydrusa leucacma, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.778.

Syntomis leucacma, Hmps., Cat. Lep. Phal. i. p.74.

Head orange. Antennæ white at apices; in ♂ laminate. Thorax with a posterior orange spot. Abdomen in both sexes with five orange rings; terminal segments black, with bluish iridescence; tuft in ♂ black. Anterior tibiæ with a posterior ochreous tuft. Forewings with pale ochreous spots. Hindwings with spots separate; discal spot roundish, its upper division sometimes small.

Type in Macleay Museum, Sydney.

N.Q. : Cairns, Geraldton.

29. SYNTOMIS PARAULA.

Hydrusa paraula, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.778.

Hydrusa macroplaca, Meyr., *op. cit.* p.781.

Syntomis macroplaca, Hmps., Cat. Lep. Phal. i. p.74, pl.iii. f.1.

Head orange. Antennæ black to apices; in ♂ serrate. Thorax with a posterior orange spot. Abdomen in both sexes with five dull reddish-orange rings; terminal segments black with greenish

iridescence; tuft in ♂ ochreous. Anterior tibiæ with an ochreous posterior spot. Forewings with spots rather large, semi-hyaline, tinged with reddish-ochreous; supplementary spot present, sometimes fairly large; sometimes supra-apical and intermediate dots. Hindwings with spots separate.

Type in Macleay Museum, Sydney.

Var. *a*. Hindwing with basal spot obscured by blackish scales; discal spot very small, its upper segment obsolete. I am disposed to identify this with *macroplaca*, but not being able to compare the type, and having no examples from Sydney, cannot be certain.

Var. *b*. Patagia with small orange spots. Abdomen with a partially developed sixth ring.

N.Q. : Cooktown, Townsville—Q. : Rockhampton, Bundaberg—N.S.W. : Sydney.

30. SYNTOMIS HEPTASPILA,* n.sp.

♂♀. 34-37 mm. Head orange. Antennæ black to apices. Thorax with a posterior orange spot, usually also with a small dot or a few orange scales on patagia. Abdomen in ♂ with seven orange rings, the last two incompletely developed; in ♀ with five rings; tuft in ♂ orange. Anterior tibiæ with an orange posterior tuft. Forewings with pale ochreous spots and a few ochreous scales at extreme base; supplementary spot always present and well-developed; sometimes supra-apical and intermediate dots; an orange dot or some orange scales at base. Hindwings with spots separate or nearly touching; discal spot roundish.

In the seven-spotted forewings this approached *S. paraula*, which is a uniformly dingy-coloured species. Some examples of *S. pyrocoma* resemble it rather nearly; unlike that species the present one is very uniform in the pattern of the wings.

Type in Coll. Turner.

N.Q. : Cairns; Geraldton, in November; Townsville in June; eight specimens.

* ἑπτασπιλος, seven-spotted.

31. SYNTOMIS TRIGONOPHORA.

Hydrusa trigonophora, Turn., Trans. Roy. Soc. S. Aust. 1898, p.97.

Head orange. Antennæ black to apices; in ♂ serrate. Thorax with a posterior orange spot. Abdomen in ♂ with seven, in ♀ with six orange rings; tuft in ♂ orange in centre, black laterally. Anterior tibiæ with posterior tuft black, sometimes partly ochreous. Forewings with pale ochreous spots; supra-orbital spot and an intermediate dot sometimes present. Hindwings with discal spot triangular, confluent or nearly touching basal spot on submedian vein.

Type in Coll. Turner.

Q. : Brisbane, Stradbroke Island—N.S.W. : Sydney (Lyell).

32. SYNTOMIS APERTA.

Syntomis aperta, Wlk., Brit. Mus. Cat. xxxi. p.72; Hmps., Cat. Lep. Phal. i. p.71.

Hydrusa nesothetis, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.783.

Head orange. Antennæ black to apices. Thorax with a posterior orange-yellow spot. Abdomen in ♂ with seven, in ♀ with six orange-yellow rings; tuft in ♂ orange-yellow. Forewings with spots rather large, ochreous-yellow; small supplementary and supra-apical spots; a broadly crescentic intermediate spot situated posteriorly. Hindwings with spots large and confluent.

Type in British Museum.

Sir Geo. Hampson's synonymy of this species needs revision.

N.S.W. : Hay.

33. SYNTOMIS MELITOSPILA,* n.sp.

♂♀. 32-44 mm. Head ochreous-yellow. Antennæ black to apices; in ♂ serrate. Thorax with a posterior ochreous-yellow spot. Abdomen in ♂ with seven, in ♀ with six ochreous-yellow rings; tuft in ♂ ochreous-yellow. Anterior tibiæ with posterior

* μελιτοσπιλος, honey-spotted.

tuft blackish. Forewings thinly scaled, somewhat translucent, wholly without iridescence; spots rather large, pale ochreous; small supplementary and intermediate spots; sometimes a small supra-apical spot. Hindwings with discal spot roundish, separate.

Type in Coll. Turner.

Q. : Dalby, in April; six specimens.

34. SYNTOMIS PYROCOMA.

Hydrusa cingulata, Butl., Journ. Linn. Soc. Zool. xii. p.352,
nom. præocc.

Hydrusa pyrocoma, Meyr., Proc. Linn. Soc. N. S. Wales, 1886,
p.780.

Hydrusa synedra, Meyr., *op. cit.* p.780.

Hydrusa hesperitis, Meyr., *op. cit.* p.781.

Hydrusa mochlotis, Meyr., *op. cit.* p.782.

Hydrusa aperta, Turn., Trans. Roy. Soc. S. Aust. 1898, p.95, *nec*
Wlk.

Head orange. Antennæ black to apices; in ♂ serrate. Thorax with well-developed posterior orange spot. Abdomen in ♂ with seven, in ♀ with six orange rings, the last two in ♂ and the last in ♀ sometimes incompletely developed; tuft in ♂ orange. Fore-tibiæ with posterior tuft wholly black or partly ochreous. Forewings with pale orange-ochreous spots; intermediate spot obsolete, dot-like, or fairly developed posteriorly; supplementary spot occasionally indicated; rarely a supra-apical dot. Hindwings with basal spot well-developed; discal spot oval; separate, its upper division sometimes very small, rarely obsolete.

Varying considerably in the development of the wing-spots, which tend to be smaller in the ♂.

Type in the Macleay Museum, Sydney.

N.Q. : Cape York, Geraldton—Q. : Rockhampton, Brisbane, Stradbroke Island, Helidon, Toowoomba, Stanthorpe—N.S.W. :
—S.A. : (?).

Dr. Culpin has given me larvæ of this species reared from the egg. They are clothed with long hairs, uniformly fuscous, and resemble larvæ of a *Spilosoma*. They were fed on *Rumex* (a naturalised weed), but are probably polyphagous.

35. SYNTOMIS DYSCHLENA, n.sp.

♂♀. 28-30 mm. Head dull ochreous. Antennæ blackish to apices; in ♂ serrate. Thorax with a dull brownish-ochreous posterior spot, and some similarly coloured scales in patagia. Abdomen in ♂ with seven, in ♀ with six narrow dull brownish-ochreous rings; tuft in ♂ dull ochreous in centre, black laterally. Anterior tibiæ with posterior tuft partly dull ochreous. Forewings dull blackish, wholly without iridescence; some ochreous scales at base and beneath costa; spots rather small, pale dull brownish-ochreous. Hindwings with spots small, separate; upper division of discal spot small or obsolete.

Type in Coll. Turner.

N.Q.: Magnetic Island near Townsville, in September; three specimens.

Gen. 3. ERESSA.

Eressa, Wlk., Brit. Mus. Cat. i. p.149; Hmps., Cat. Lep. Phal. i. p.115.

Choromeles, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.785.

Tongue well-developed or small. Palpi short, porrect. Antennæ in ♂ pectinate or simple. Posterior tibiæ with middle spurs absent. Forewings with 7, 8, 9, 10, 11 stalked. Hindwings with 4 and 7 absent, 3 and 5 widely separate at base.

Type *E. confinis*, Wlk., from India.

An Indo-Malayan genus of nearly thirty known species; the Australian forms are readily divided into two sections.

- | | |
|---|-----------------------|
| 1. Hindwings without spots..... | <i>furva</i> . |
| Hindwings spotted | 2. |
| 2. Hindwings with basal and discal spots..... | 3. |
| Hindwings with basal spot only..... | 4. |
| 3. Patagia with basal ochreous spot..... | <i>strepsimeris</i> . |
| Patagia wholly black..... | <i>geographica</i> . |
| 4. Face orange..... | <i>megatorna</i> , |
| Face black..... | <i>angustipenna</i> . |

Section i. *Antennæ of ♂ bipectinate.*36. *ERESSA FURVA.*

Eressa furva, Hmps., Cat. Lep. Phal. i. p.115.

Readily distinguished by the absence of spots in the hindwings, which in the ♂ are lobed and folded over on the dorsal margin.

Type in British Museum.

N.A. : Damma Island.

37. *ERESSA STREPSIMERIS.*

Choromeles strepsimeris, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.786.

Eressa xanthostacta, Hmps., Ann. Mag. Nat. Hist. (7), xi. p.339 (1903).

The posterior legs of the ♂ are ochreous, those of the ♀ black.

Type in Macleay Museum, Sydney.

N.Q. : Townsville, Bowen.

E. lutulenta, Snel., an allied species from Celebes and Java, has the antennæ white-tipped according to Hampson, and in Snellen's figure the basal spot of hindwing is absent. A specimen from Port Darwin, N.A., placed in the British Museum under *lutulenta* may possibly be a form of *strepsimeris*.

38. *ERESSA GEOGRAPHICA.*

Choromeles geographica, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.785.

Eressa detola, Swin., Cat. Oxf. Mus. i. p.53 (1892).

Eressa geographica, Hmps., Cat. Lep. Phal. i. p.118, pl.iv. f.25.

Type in Coll. Meyrick.

Var. *a*. Discal spot of hindwings larger and divided into three sections by veins 3 and 5.

Q. : Brisbane, Warwick—N.S.W. : Ballina (Richmond River; Waterhouse).

Section ii. *Antennæ of ♂ simple.*

39. ERESSA MEGATORNA.

Eressa megatorna, Hmps., Cat. Lep. Phal. i. p.122.

Very similar to *E. angustipenna*, but readily distinguished by the thick tufts of scales on forelegs of ♂.

Type in British Museum.

N.Q. : Mackay.

40. ERESSA ANGUSTIPENNA.

Hydrusa angustipenna, Luc., Proc. Linn. Soc. N. S. Wales, 1889, p.1087.

Syntomis angustipenna, Turn., Trans. Roy. Soc. S. Aust., 1898, p.92.

Eressa angustipenna, Hmps., Cat. Lep. Phal. i. p.122.

Type in Coll. Lucas.

Q. : Nambour, Brisbane, Southport.

Gen. 4. EUCHROMIA.

Euchromia, Hb., Verz. p.121; Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.786; Hmps., Cat. Lep. Phal. i. p.293.

Tongue well-developed. Palpi moderate, porrect, or obliquely ascending. Antennæ in both sexes with shaft slightly dilated in middle, and bipectinate, extreme apex simple. Posterior tibiæ with two pairs of short spurs. Forewings with 7, 8, 9, 10 stalked. Hindwings with 2 and 4 connate or stalked, 3 and 5 absent, 6 and 7 connate or stalked.

Type *E. sperchia*, Cram., from Africa.

An Indo-Malayan or African genus containing twenty-five known species. It is not closely allied to the preceding genera, but as Sir Geo. Hampson remarks is the only Old World genus with Neotropical affinities. The species are remarkable for the brilliant colouring of the abdomen.

- | | |
|---|------------------|
| 1. Wings with the spots yellow..... | <i>polymena.</i> |
| Wings with the spots colourless..... | 2. |
| 2. Abdomen with dorsum of first segment black, with metallic blue scales..... | <i>creusa.</i> |
| Abdomen with dorsum of first segment yellowish..... | 3. |
| 3. Abdomen with two blue and three crimson bands on dorsum..... | <i>iria.</i> |
| Abdomen with four blue and one red band on dorsum..... | <i>lurlina.</i> |

41. EUCHROMIA POLYMENA.

Sphinx polymena, Linn., Syst. Nat. i. p.494.

Euchromia polymena, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.787; Hmps., Cat. Lep. Phal. i. p.297.

North Australia: one specimen in Macleay Museum, whose locality requires confirmation. Also from Celebes, Philippines, Ceylon, and India.

42. EUCHROMIA CREUSA.

Sphinx creusa, Linn., Syst. Nat. i. p.494.

Sphinx thelebas, Cram., Pap. Exot. ii. pl.150D.

Sphinx irus, Stoll, Pap. Exot. iv. pl.368A.

Glaucopis ganymede, Dbld., Stokes' Australia, i. p.519, pl.iii. f.3.

Euchromia irus, Meyr., Proc. Linn. Soc. N. S. Wales, 1886, p.787.

Euchromia creusa, Hmps., Cat. Lep. Phal. i. p.304.

N.Q.: Thursday Island, Cape York, Lizard Island. Mr. Rowland Turner informs me that he has taken it at Mackay. Also from New Guinea, Solomons, New Hebrides, Kei Island, Gilolo, Ceram, and Celebes.

43. EUCHROMIA IRIA.

Glaucopis irius, Bdv., Voy. Astrolabe, Lep. p.192, pl.v. f.8.

Glaucopis boisduvalii, Montr., Ann. Sci. Phys. Lyon (2), viii. p.409.

Hira aruica, Wlk., Brit. Mus. Cat. xxxi. p.98.

Euchromia iria, Hmps., Cat. Lep. Phal. i. p.303.

♂. 42 mm. Differs from *E. creusa* in its smaller size, and in the abdomen being dorsally yellowish on first segment, remaining segments black with moderate metallic blue apical bands on second and third, narrow crimson bands on third, fourth, and fifth, all bands on apices of segments; ventral surface crimson, bases of segments black in centre.

N.Q.: Cape York, in May; one specimen received from Mr. Rowland Turner. Also from New Guinea, Aru, and Moluccas.

44. EUCHROMIA LURLINA.

Euchromia lurlina, Butl., Trans. Ent. Soc. 1888, p.110; Hmps.,
Cat. Lep. Phal. i. p.301, pl.xi. f.19.

Type in British Museum.

N.Q.: Thursday Island; but this locality requires confirma-
tion. Also from Louisiades.

INDEX OF GENERA AND SPECIES OF SYNTOMIDÆ

(Names in Italics are Synonyms.)

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<i>dyschlæna</i> , n.sp.	35	<i>pyrocoma</i> , Meyr.	34
<i>ecliptis</i> , Meyr.	8	<i>pyrrhoderæ</i> , Meyr.	23
<i>Eressa</i>	835, 855	<i>recedens</i> , Luc.	12
<i>eschatias</i> , Meyr.	15	<i>sangaris</i> , Wlgrn.	23
<i>Euchromia</i>	835, 857	<i>sphenodes</i> , Meyr.	1
<i>frustulenta</i> , Swin.	23	<i>sphenophora</i> , Turn.	6
<i>furva</i> , Hmps.	36	<i>stelotis</i> , Meyr.	5
<i>ganymede</i> , Dbld.	42	<i>stenozonea</i> , Hmps.	7
<i>geographica</i> , Meyr.	38	<i>strepsimeris</i> , Meyr.	37
<i>guttulosa</i> , Wlk.	2	<i>synedra</i> , Meyr.	34
<i>heptaspila</i> , n.sp.	30	<i>Syntomis</i>	835, 837
<i>hesperitis</i> , Meyr.	34	<i>thelebas</i> , Cram.	42
<i>huebneri</i> , Bdv.	23	<i>trigonophora</i> , Turn.	31
<i>humeralis</i> , Butl.	26	<i>xanthomela</i> , Wlk.	23
<i>hyalota</i> , Meyr.	22	<i>xanthosoma</i> , Turn.	3
<i>Hydrusa</i>	837	<i>xanthostacta</i> , Hmps.	37
<i>insularis</i> , Butl.	5	<i>xanthura</i> , n.sp.	11